March 21, 2012

MDEQ
Attn: Mr. Joseph Walczak
525 W. Allegan St., 4th Floor North
Lansing, MI 48909

Project: WWW Tannery, 41000451

Dear Mr. Joseph Walczak,

Enclosed is a copy of the laboratory report for the following work order(s) received by TriMatrix Laboratories:

Work Order	Received	Description
1203091	03/06/2012	Laboratory Services

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ACLASS DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#10-046-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#002841); Kansas DPH (#E-10302); Kentucky DEP (#0021); Louisiana DEP (#03068); Michigan DPH (#0034); Minnesota DPH (#367345); New York ELAP (#44950); North Carolina DNRE (#659); Texas CEQ (#T104704495-11-1); Virginia DCLS (#1239); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-09-00163).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications section of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Lisa M. Harvey
Project Chemist

5560 Corporate Exchange Court SE ♦ Grand Rapids, MI 49512 ♦ 616.975.4500 ♦ Fax 616.942.7463 ♦ www.trimatrixlabs.com

TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**MDEQ**	Work Order:	**1203091**
Project:	WWW Tannery, 41000451	Description:	Laboratory Services
Client Sample ID:	**SD1/0-12**	Sampled:	03/06/12 11:15
Lab Sample ID:	**1203091-01**	Sampled By:	J.Walczak
Matrix:	Soil	Received:	03/06/12 17:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**47**		0.1	0.1	%	1	USEPA-3550B	03/12/12 13:10	KCS	1203202
Chromium, Hexavalent	4200	U	4200	380	ug/kg dry	1	USEPA-7196A	03/12/12 12:11	HLB	1203179

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**MDEQ**	Work Order:	**1203091**
Project:	WWW Tannery, 41000451	Description:	Laboratory Services
Client Sample ID:	**SD1/12-24**	Sampled:	03/06/12 11:15
Lab Sample ID:	**1203091-02**	Sampled By:	J.Walczak
Matrix:	Soil	Received:	03/06/12 17:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**77**		0.1	0.1	%	1	USEPA-3550B	03/12/12 13:10	KCS	1203202
Chromium, Hexavalent	2600	U	2600	230	ug/kg dry	1	USEPA-7196A	03/12/12 12:12	HLB	1203179

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**MDEQ**	Work Order:	**1203091**
Project:	WWW Tannery, 41000451	Description:	Laboratory Services
Client Sample ID:	**SD2/0-9**	Sampled:	03/06/12 12:00
Lab Sample ID:	**1203091-03**	Sampled By:	J.Walczak
Matrix:	Soil	Received:	03/06/12 17:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**36**		0.1	0.1	%	1	USEPA-3550B	03/12/12 13:10	KCS	1203202
Chromium, Hexavalent	5600	U	5600	510	ug/kg dry	1	USEPA-7196A	03/12/12 12:13	HLB	1203179

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**MDEQ**	Work Order:	**1203091**
Project:	WWW Tannery, 41000451	Description:	Laboratory Services
Client Sample ID:	**SD2/9-15**	Sampled:	03/06/12 12:00
Lab Sample ID:	**1203091-04**	Sampled By:	J.Walczak
Matrix:	Soil	Received:	03/06/12 17:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**55**		0.1	0.1	%	1	USEPA-3550B	03/12/12 13:10	KCS	1203202
Chromium, Hexavalent	3700	U	3700	330	ug/kg dry	1	USEPA-7196A	03/12/12 12:16	HLB	1203179

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**MDEQ**	Work Order:	**1203091**
Project:	WWW Tannery, 41000451	Description:	Laboratory Services
Client Sample ID:	**SD3/0-6**	Sampled:	03/06/12 12:30
Lab Sample ID:	**1203091-05**	Sampled By:	J.Walczak
Matrix:	Soil	Received:	03/06/12 17:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**36**		0.1	0.1	%	1	USEPA-3550B	03/12/12 13:10	KCS	1203202
Chromium, Hexavalent	5500	U	5500	490	ug/kg dry	1	USEPA-7196A	03/12/12 12:19	HLB	1203179

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**MDEQ**	Work Order:	**1203091**
Project:	WWW Tannery, 41000451	Description:	Laboratory Services
Client Sample ID:	**SD3/6-28**	Sampled:	03/06/12 12:30
Lab Sample ID:	**1203091-06**	Sampled By:	J.Walczak
Matrix:	Soil	Received:	03/06/12 17:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**37**		0.1	0.1	%	1	USEPA-3550B	03/12/12 13:10	KCS	1203202
*Chromium, Hexavalent	5300	U	5300	480	ug/kg dry	1	USEPA-7196A	03/12/12 12:20	HLB	1203179

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**MDEQ**	Work Order:	**1203091**
Project:	WWW Tannery, 41000451	Description:	Laboratory Services
Client Sample ID:	**SD4/0-14**	Sampled:	03/06/12 14:30
Lab Sample ID:	**1203091-07**	Sampled By:	J.Walczak
Matrix:	Soil	Received:	03/06/12 17:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**47**		0.1	0.1	%	1	USEPA-3550B	03/12/12 13:10	KCS	1203202
Chromium, Hexavalent	**390**	**J**	4000	360	ug/kg dry	1	USEPA-7196A	03/12/12 12:29	HLB	1203179

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**MDEQ**	Work Order:	**1203091**
Project:	WWW Tannery, 41000451	Description:	Laboratory Services
Client Sample ID:	**SD5/0-15**	Sampled:	03/06/12 15:05
Lab Sample ID:	**1203091-08**	Sampled By:	J.Walczak
Matrix:	Soil	Received:	03/06/12 17:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**30**		0.1	0.1	%	1	USEPA-3550B	03/12/12 13:10	KCS	1203202
Chromium, Hexavalent	6600	U	6600	600	ug/kg dry	1	USEPA-7196A	03/12/12 12:31	HLB	1203179

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**MDEQ**	Work Order:	**1203091**
Project:	WWW Tannery, 41000451	Description:	Laboratory Services
Client Sample ID:	**SD5/15-33**	Sampled:	03/06/12 15:05
Lab Sample ID:	**1203091-09**	Sampled By:	J.Walczak
Matrix:	Soil	Received:	03/06/12 17:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**38**		0.1	0.1	%	1	USEPA-3550B	03/12/12 13:10	KCS	1203202
Chromium, Hexavalent	5200	U	5200	470	ug/kg dry	1	USEPA-7196A	03/12/12 12:33	HLB	1203179

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**MDEQ**	Work Order:	**1203091**
Project:	WWW Tannery, 41000451	Description:	Laboratory Services
Client Sample ID:	**SD6/0-12**	Sampled:	03/06/12 15:35
Lab Sample ID:	**1203091-10**	Sampled By:	J.Walczak
Matrix:	Soil	Received:	03/06/12 17:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result		RL	MDL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Percent Solids	**59**		0.1	0.1	%	1	USEPA-3550B	03/12/12 13:10	KCS	1203202
Chromium, Hexavalent	3400	U	3400	300	ug/kg dry	1	USEPA-7196A	03/12/12 12:34	HLB	1203179

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

QC Type	Sample Conc.	Spike Qty.	Result	Unit	Spike % Rec.	Control Limits	RPD	RPD Limits	RL	MDL
Analyte: Chromium, Hexavalent/USEPA-7196A										
QC Batch: 1203179 (3060A Alkaline Digestion)							Analyzed: 03/12/2012		By: HLB	
Method Blank			2000 U	ug/kg wet					2000	180
Laboratory Control Sample		40000	**37000**	ug/kg wet	92	72-117		20	2000	180
Laboratory Control Sample		1800000	**1580000**	ug/kg wet	88	72-117		20	200000	18000
1203091-06 [SD3/6-28]										
Matrix Spike	<RLU	98300	**1930 J**	ug/kg dry	**2**	46-126		20	4900	440
Matrix Spike	<RLU	2860000	490000 U	ug/kg dry	**0**	46-126		20	490000	44000
Duplicate	<RLU		5300 U	ug/kg dry				20	5300	480
Analyte: Percent Solids/USEPA-3550B										
QC Batch: 1203202 (General Inorganic Prep)							Analyzed: 03/12/2012		By: KCS	
Method Blank			0.1 U	%					0.1	0.1
1203091-02 [SD1/12-24]										
Duplicate	77		**78**	%			2	5	0.1	0.1

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STATEMENT OF DATA QUALIFICATIONS

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Qualification: The post-digestion spike recovery for this sample was outside the control limit. Sample matrix interference is suspected and the reported result must be considered as estimated.

Analysis: USEPA-7196A

Sample/Analyte: 1203091-06 SD3/6-28 Chromium, Hexavalent

Qualification: The MS and/or MSD recovery was outside the control limit. The non-spiked sample result is considered estimated.

Analysis: USEPA-7196A

Sample/Analyte: 1203091-06 SD3/6-28 Chromium, Hexavalent

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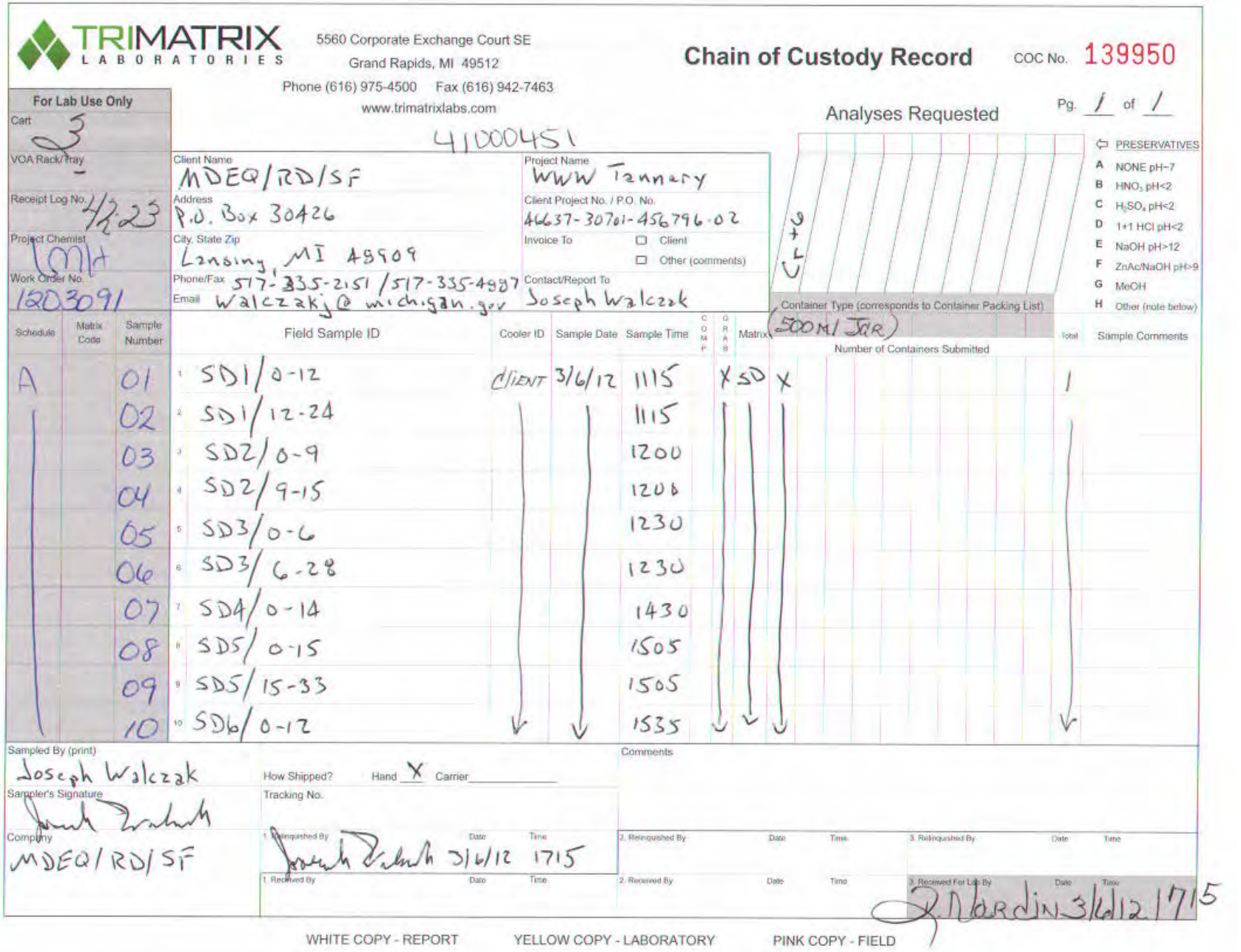

TRIMATRIX LABORATORIES

5560 Corporate Exchange Court SE
Grand Rapids, MI 49512
Phone (616) 975-4500 Fax (616) 942-7463
www.trimatrixlabs.com

Chain of Custody Record

COC No. 139950

Pg. 1 of 1

4100451

For Lab Use Only
Cart: 3
VOA Rack/Tray: -
Receipt Log No.: 4123
Project Chemist: LMH
Work Order No.: 1203091

Client Name: MDEQ/RD/SF
Address: P.O. Box 30426
City, State Zip: Lansing, MI 48909
Phone/Fax: 517-335-2151 / 517-335-4997
Email: walczakj@michigan.gov

Project Name: WWW Tannery
Client Project No. / P.O. No.: 46637-30701-456796-02
Invoice To: ☐ Client ☐ Other (comments)
Contact/Report To: Joseph Walczak

Analyses Requested

PRESERVATIVES
A NONE pH~7
B HNO_3 pH<2
C H_2SO_4 pH<2
D 1+1 HCl pH<2
E NaOH pH>12
F ZnAc/NaOH pH>9
G MeOH
H Other (note below)

Container Type (corresponds to Container Packing List): (500ML JAR)
Number of Containers Submitted

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	COMP	GRAB	Matrix	Total	Sample Comments
A		01	1 SD1/0-12	CLIENT	3/6/12	1115	X	SD	X	1	
		02	2 SD1/12-24			1115					
		03	3 SD2/0-9			1200					
		04	4 SD2/9-15			1206					
		05	5 SD3/0-6			1230					
		06	6 SD3/6-28			1230					
		07	7 SD4/0-14			1430					
		08	8 SD5/0-15			1505					
		09	9 SD5/15-33			1505					
		10	10 SD6/0-12			1535					

Sampled By (print): Joseph Walczak
Sampler's Signature: [signature]
Company: MDEQ/RD/SF

How Shipped? Hand X Carrier
Tracking No.

Comments

1. Relinquished By	Date	Time	2. Relinquished By	Date	Time	3. Relinquished By	Date	Time
[signature]	3/6/12	1715						
1. Received By	Date	Time	2. Received By	Date	Time	3. Received For Lab By	Date	Time
						[signature]	3/6/12	1715

WHITE COPY - REPORT YELLOW COPY - LABORATORY PINK COPY - FIELD

SAMPLE RECEIVING / LOG-IN CHECKLIST

TRIMATRIX LABORATORIES

Client: MDEQ/RD/SF | Work Order #: 1203091
Receipt Record Page/Line #: 4-2-23 | New / Add To | Project Chemist: MH | Sample #s: 01-10

Recorded by (initials/date): JN 3/6/12

Cooler / Box / Other | Qty Received: 1 | IR Gun (#202) | Thermometer Used: Digital Thermometer (#54) / Other (#____) | See Additional Cooler Information Form

Cooler #	Time	Cooler #	Time	Cooler #	Time	Cooler #	Time
CLIENT	1856						

Custody Seals: None / Present / Intact / Present / Not Intact

Coolant Location: Dispersed / Top / Middle / Bottom

Coolant/Temperature Taken Via: Loose Ice / Avg 2-3 containers; Bagged Ice / Avg 2-3 containers; Blue Ice / Avg 2-3 containers; None / Avg 2-3 containers

Alternate Temperature Taken Via: Temperature Blank (TB); 1 Container

Recorded °C	Correction Factor °C	Actual °C
Temp Blank:		
TB location: Representative / Not Representative		
1 15.6	0	15.6
2 14.9	0	14.9
3 14.2	0	14.2
Average °C		14.9

Cooler ID on COC? VOC Trip Blank received?

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received

Yes	No	
☑	☐	Chain of Custody record(s)? If No, Initiated By ____
☑		Received for Lab Signed/Date/Time?
☐	☑	Shipping document?
☐	☐	Other ____

COC Information

☑ TriMatrix COC ☐ Other ____

COC ID Numbers: 139950

Check COC for Accuracy

Yes	No	
☑	☐	Analysis Requested?
☑	☐	Sample ID matches COC?
☑	☐	Sample Date and Time matches COC?
☑		Container type completed on COC?
☑	☐	All container types indicated are received?

Check Sample Preservation

N/A	Yes	No	
	☐	☑	Average sample temperature ≤6° C?
☐	☑	☐	Was thermal preservation required?
☑	☐	☐	If "No", Project Chemist Approval Initials: ____
☑	☐	☐	If "Yes" Completed Non Con Cooler - Cont Inventory Form?
☑	☐	☐	Completed Sample Preservation Verification Form?
☑	☐	☐	Samples chemically preserved correctly?
☑	☐	☐	If "No", added orange tag?
	☐	☑	Received pre-preserved VOC soils?

☐ MeOH ☐ Na_2SO_4

samples just collected (MH)

Check for Short Hold-Time Prep/Analyses

☐ Bacteriological
☐ Air Bags
☐ EnCores / Methanol Pre-Preserved
☐ Formaldehyde/Aldehyde
☐ Green-tagged containers
☐ Yellow/White-tagged 1L ambers (SV Prep-Lab)

AFTER HOURS ONLY:
COPIES OF COC TO LAB AREA(S)
☑ NONE RECEIVED
☐ RECEIVED. COCs TO LAB(S)

Sample Condition Summary

N/A	Yes	No	
	☐	☑	Broken containers/lids?
	☐	☑	Missing or incomplete labels?
	☐	☑	Illegible information on labels?
	☐	☑	Low volume received?
	☐	☑	Inappropriate or non-TriMatrix containers received?
☑	☐	☐	VOC vials / TOX containers have headspace?
☑	☐	☐	Extra sample locations / containers not listed on COC?

Notes

☐ Trip Blank received ☐ Trip Blank not listed on COC

Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?
JN 3/6/12	JN 3/6/12	Yes / No

Log In Forms - Receiving\Log-In_Checklist revision: 3.4

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